REMARKS

Claims 1-17, 19, 24, 28-45, 50-51, and 53-67 are pending in the instant application, of which claims 2, 7, 9, 11, 16, 28-45, 50-51, and 61-67 are presently withdrawn. By this amendment, independent claim 1 is amended, claims 12-16 are canceled, and claims 1, 3-6, 8, 10, 17, 19, 24, and 53-60 are presented to the Examiner for further prosecution on the merits.

A. Introduction

In the outstanding Office Action Made Final, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a); rejected claims 1, 3-6, 8, 10, 12-15, 17, 19, 24, and 53-60 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement; rejected claims 1, 4, 6, 8, 10, and 53-59 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,408,204 to Hirschman (hereinafter referred to as "the Hirschman reference") in view of U.S. Patent No. 3,871,359 to Pacela (hereinafter referred to as "the Pacela reference"); rejected claims 3 and 5 under 35 U.S.C. § 103(a) as being unpatentable over the Hirschman reference as modified by the Pacela reference and further in view of U.S. Patent No. 5,114,424 to Hagen et al. (hereinafter referred to as "the Hagen et al. reference"); rejected claims 1, 15, 53, and 54 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,957,037 to Fletcher et al. (hereinafter referred to as "the Fletcher et al. reference") in view of the Pacela reference; rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over the Fletcher et al. reference as modified by the Pacela reference and further in view of U.S. Patent No. 5,810,762 to Hofmann (hereinafter referred to as "the Hofmann reference"); rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,895,163 to Libke et al. (hereinafter referred to as "the Libke et al. reference") in view of the Pacela reference; rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over the Libke et al. reference as modified by the Pacela reference and further in view of U.S. Patent No. 4,917,093 to Dufresne et al. (hereinafter referred to as "the Dufresne et al. reference"); rejected claims 1 and 24 under 35 U.S.C. § 103(a) as being

unpatentable over U.S. Patent No. 5,372,141 to Gallup et al. (hereinafter referred to as "the Gallup et al. reference") in view of the Pacela reference; rejected claims 1 and 60 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,292,691 to Petrucelli et al. (hereinafter referred to as "the Petrucelli et al. reference") in view of the Pacela reference; rejected claims 1, 19, and 60 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,578,635 to Mee et al. (hereinafter referred to as "the Mee et al. reference") in view of the Petrucelli et al. reference and the Pacela reference; rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0176808 to Masuo (hereinafter referred to as "the Masuo reference") in view of the Pacela reference; rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over the Masuo reference as modified by the Pacela reference and further in view of the Fletcher et al. reference; and rejected claims 12 and 14 under 35 U.S.C. § 103(a) as being unpatentable over the Masuo reference as modified by the Pacela reference and the Fletcher et al. reference and further in view of the Hofmann reference.

B. Objection to the Drawings

In the outstanding Office Action Made Final, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a) because "the combined limitations of claim 14 [sic] must be shown in the same embodiment," and because "the new figure 7 is redundant and fails to show two electrode distance adjusters that are separated from each other by a predetermined distance and are perpendicular to each other as set forth in claim 13."

Applicants respectfully traverse this drawing objection for the following reasons:

First, the Examiner's objection appears to refer to claim 13, not claim 14, both of which are now canceled. While claim 13 recites a second electrode distance adjuster, claim 14 recites only one electrode distance adjuster. Thus, the Examiner's comments regarding two electrode distance adjusters are only germane to claim 13.

Second, the Examiner's objection regarding redundancy appears to refer to a comparison of FIG. 4A and FIG. 7. While these drawings are similar, they are not identical. FIG. 4A depicts a single electrode distance adjuster while FIG. 7 depicts the structure of a second electrode distance adjuster. The distance adjuster illustrated in FIG. 7 is disposed perpendicular to the distance adjuster illustrated in FIG. 4. This is fully explained and supported in the specification in paragraph [0045.1] as entered in the amendment filed March 2, 2006.

Applicants respectfully request that the drawing objection be withdrawn.

C. Rejection under 35 U.S.C. § 112, First Paragraph

In the outstanding Office Action Made Final, the Examiner rejected claims 1, 3-6, 8, 10, 12-15, 17, 19, 24, and 53-60 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Applicants respectfully submit that this rejection is traversed as to claims 12-15 as they are canceled.

Applicants respectfully traverse these rejections for the following reasons:

First, while the Examiner alleges that these claims fail to comply with the written description requirement, the Examiner argues that the amendment to claim 1 introduces new matter. As stated in MPEP § 2163.01, however, a written description requirement issue generally involves the question of whether the subject matter of a claim is supported by the disclosure of an application as filed. As framed by the court in *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981), the concept of new matter is properly employed as a basis for objection to amendments to the abstract, specification or drawings. Accordingly, applicants respectfully submit that the Examiner's allegation of new matter in a claim to support a written description rejection under 35 U.S.C. § 112, first paragraph, is improper and should be withdrawn.

Second, while the Examiner admits that "the original disclosure appears to provide support for supplying a constant current," the Examiner argues that "the original disclosure does not appear to provide sufficient support for supplying a direct current." As stated in MPEP § 2163.06, information contained in the specification may be added to any other part of the application without introducing new matter. The specification, as originally filed, describes measurement of the accurate direct current (DC) level of a signal on page 25 in paragraph [0057]. In order to accurately measure a DC level of a signal, the applied constant current must also be a DC current. Accordingly, applicants respectfully submit that incorporation of this information from the specification into the claims does not introduce new matter.

Applicants respectfully request that the rejection of claims 1, 3-6, 8, 10, 17, 19, 24, and 53-60 under 35 U.S.C. § 112, first paragraph be withdrawn.

D. Asserted Obviousness Rejection of Claims 1, 4, 6, 8, 10, and 53-59

In the outstanding Office Action Made Final, the Examiner rejected claims 1, 4, 6, 8, 10, and 53-59 under 35 U.S.C. § 103(a) as being unpatentable over the Hirschman reference in view of the Pacela reference.

As amended, independent claim 1 recites, in part:

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other

Applicants respectfully submit that neither the Hirschman reference nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Hirschman reference in view of the Pacela reference.

Claims 4, 6, 8, 10, and 53-59 ultimately depend from independent claim 1. Hence, claims 4, 6, 8, 10, and 53-59 are at least allowable as depending from an allowable base

claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claims 4, 6, 8, 10, and 53-59 under 35 U.S.C. § 103(a) over the Hirschman reference in view of the Pacela reference.

Asserted Obviousness Rejection of Claims 3 and 5

In the outstanding Office Action Made Final, the Examiner rejected claims 3 and 5 under 35 U.S.C. § 103(a) as being unpatentable over the Hirschman reference as modified by the Pacela reference and further in view of the Hagen et al. reference.

Claims 3 and 5 ultimately depend from independent claim 1. Hence, claims 3 and 5 are at least allowable as depending from an allowable base claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claims 3 and 5 under 35 U.S.C. § 103(a) over the Hirschman reference as modified by the Pacela reference and further in view of the Hagen et al. reference.

Asserted Obviousness Rejection of Claims 1, 15, 53, and 54

In the outstanding Office Action Made Final, the Examiner rejected claims 1, 15, 53, and 54 under 35 U.S.C. § 103(a) as being unpatentable over the Fletcher et al. reference in view of the Pacela reference.

Applicants respectfully submit that this rejection is traversed as to claim 15 as it is canceled.

As amended, independent claim 1 recites, in part,

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other.

Applicants respectfully submit that neither the Fletcher et al. reference nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Fletcher et al. reference in view of the Pacela reference.

Claims 53 and 54 ultimately depend from independent claim 1. Hence, claims 53 and 54 are at least allowable as depending from an allowable base claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claims 53 and 54 under 35 U.S.C. § 103(a) over the Fletcher et al. reference in view of the Pacela reference.

G. Asserted Obviousness Rejection of Claim 14

In the outstanding Office Action Made Final, the Examiner rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over the Fletcher et al. reference as modified by the Pacela reference and further in view of the Hofmann reference.

Applicants respectfully submit that this rejection is traversed as to claim 14 as it is canceled.

H. Asserted Obviousness Rejection of Claim 1

In the outstanding Office Action Made Final, the Examiner rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over the Libke et al. reference in view of the Pacela reference.

As amended, independent claim 1 recites, in part,

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other.

Applicants respectfully submit that neither the Libke et al. reference nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Libke et al. reference in view of the Pacela reference.

I. Asserted Obviousness Rejection of Claim 17

In the outstanding Office Action Made Final, the Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over the Libke et al. reference as modified by the Pacela reference and further in view of the Dufresne et al. reference.

Claim 17 depends from independent claim 1. Hence, claim 17 is at least allowable as depending from an allowable base claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claim 17 under 35 U.S.C. § 103(a) over the Libke et al. reference as modified by the Pacela reference and further in view of the Dufresne et al. reference.

J. Asserted Obviousness Rejection of Claims 1 and 24

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 24 under 35 U.S.C. § 103(a) as being unpatentable over the Gallup et al. reference in view of the Pacela reference.

As amended, independent claim 1 recites, in part,

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other.

Applicants respectfully submit that neither the Gallup et al. reference nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Gallup et al. reference in view of the Pacela reference.

Claim 24 depends from independent claim 1. Hence, claim 24 is at least allowable as depending from an allowable base claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claim 24 under 35 U.S.C. § 103(a) over the Gallup et al. reference in view of the Pacela reference.

K. Asserted Obviousness Rejection of Claims 1 and 60

In the outstanding Office Action Made Final, the Examiner rejected claims 1 and 60 under 35 U.S.C. § 103(a) as being unpatentable over the Petrucelli et al. reference in view of the Pacela reference.

As amended, independent claim 1 recites, in part,

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other.

Applicants respectfully submit that neither the Petrucelli et al. reference nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Petrucelli et al. reference in view of the Pacela reference.

Claim 60 depends from independent claim 1. Hence, claim 60 is at least allowable as depending from an allowable base claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claim 60 under 35 U.S.C. § 103(a) over the Petrucelli et al. reference in view of the Pacela reference.

L. Asserted Obviousness Rejection of Claims 1, 19, and 60

In the outstanding Office Action Made Final, the Examiner rejected claims 1, 19, and 60 under 35 U.S.C. § 103(a) as being unpatentable over the Mee et al. reference in view of the Petrucelli et al. reference and the Pacela reference.

As amended, independent claim 1 recites, in part,

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other.

Applicants respectfully submit that neither the Mee et al. reference, nor the Petrucelli et al. reference, nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Mee et al. reference in view of the Petrucelli et al. reference and the Pacela reference.

Claims 19 and 60 ultimately depend from independent claim 1. Hence, claims 19 and 60 are at least allowable as depending from an allowable base claim, namely independent claim 1, which includes allowable subject matter that is neither taught nor suggested by the references of record. Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of claims 19 and 60 under 35 U.S.C. § 103(a) over the Mee et al. reference in view of the Petrucelli et al. reference and the Pacela reference.

M. Asserted Obviousness Rejection of Claim 1

In the outstanding Office Action Made Final, the Examiner rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over the Masuo reference in view of the Pacela reference.

As amended, independent claim 1 recites, in part,

the first stationary screw line and the second stationary screw line being separated from each other by a predetermined distance and perpendicular to each other. ,, e

Applicants respectfully submit that neither the Masuo reference nor the Pacela reference teaches or suggests the screw line configuration as claimed in claim 1.

Accordingly, applicants respectfully request favorable reconsideration and withdrawal of the rejection of independent claim 1 under 35 U.S.C. § 103(a) over the Masuo reference in view of the Pacela reference.

N. Asserted Obviousness Rejection of Claim 15

In the outstanding Office Action Made Final, the Examiner rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over the Masuo reference as modified by the Pacela reference and further in view of the Fletcher et al. reference.

Applicants respectfully submit that this rejection is traversed as to claim 15 as it is canceled.

O. Asserted Obviousness Rejection of Claims 12 and 14

In the outstanding Office Action Made Final, the Examiner rejected claims 12 and 14 under 35 U.S.C. § 103(a) as being unpatentable over the Masuo reference as modified by the Pacela reference and the Fletcher et al. reference and further in view of the Hofmann reference.

Applicants respectfully submit that this rejection is traversed as to claims 12 and 14 as they are canceled.

P. Conclusion

The remaining documents cited by the Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

Respectfully submitted,

LEE & MORSE, P.C.

Date: February 26, 2007

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PETITION and DEPOSIT ACCOUNT CHARGE AUTHORIZATION

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. <u>50-1645</u>.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. <u>50-1645</u>.